

# PIXEL BAR 40™

user manual 1.0

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## GENERAL INFORMATION

### INTRODUCTION

Congratulations, you have just purchased one of the most innovative and reliable ArtNet to DMX converter on the market today! The **PIXEL BAR 40™** has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

### UNPACKING

Thank you for purchasing the **PIXEL BAR 40™** by Elation Professional®. Every **PIXEL BAR 40™** has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your unit for damage and be sure all accessories necessary to operate the unit have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this unit to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

### BOX CONTENTS

- (1) Mounting Bracket
- Manual & Warranty Card



### MANUAL UPDATES

Please check [www.elationlighting.com](http://www.elationlighting.com) for the latest revision/update of this manual.

## CUSTOMER SUPPORT

Elation Professional® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at [www.elationlighting.com](http://www.elationlighting.com) for any comments or suggestions. For service related issue please contact Elation Professional®. Service Hours are Monday through Friday 8:00 a.m. to 5:00 p.m. PST.

**Voice: 323-582-3322**

**Fax: 323-832-9142**

E-mail: [support@elationlighting.com](mailto:support@elationlighting.com)

Forum: [www.ElationLighting.com/forum](http://www.ElationLighting.com/forum)

## WARRANTY REGISTRATION

The **PIXEL BAR 40™** carries a two-year (730 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support at 323-582-3322.



### **I M P O R T A N T   N O T I C E !**

**There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufactures warranty. Damages resulting from modifications to this fixture and/or the disregard of safety and general user instructions found in this user manual void the manufactures warranty and are not subject to any warranty claims and/or repairs.**

## 2 - YEAR LIMITED WARRANTY

A. Elation Professional® hereby warrants, to the original purchaser, Elation Professional® products to be free of manufacturing defects in material and workmanship for a period of two years, (730 days) from the date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Elation Professional® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional® will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional® shall have no liability what so ever for loss of or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which Elation Professional® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional® factory unless prior written authorization was issued to purchaser by Elation Professional®; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, Elation Professional® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional®. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.

E. Elation Professional® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional® be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

G. This warranty is the only written warranty applicable to Elation Professional® Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

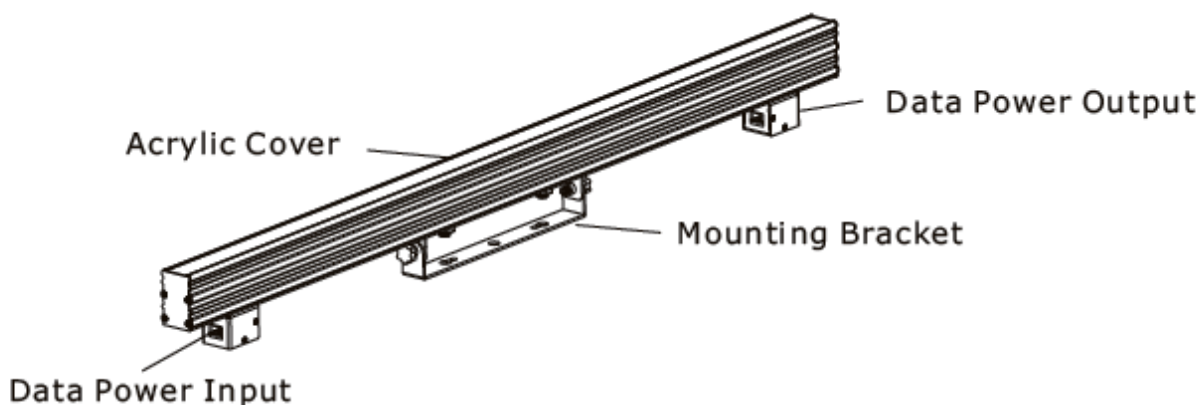
## SAFETY INSTRUCTIONS



The **PIXEL BAR 40™** is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this device due to the disregard of the information printed in this manual.

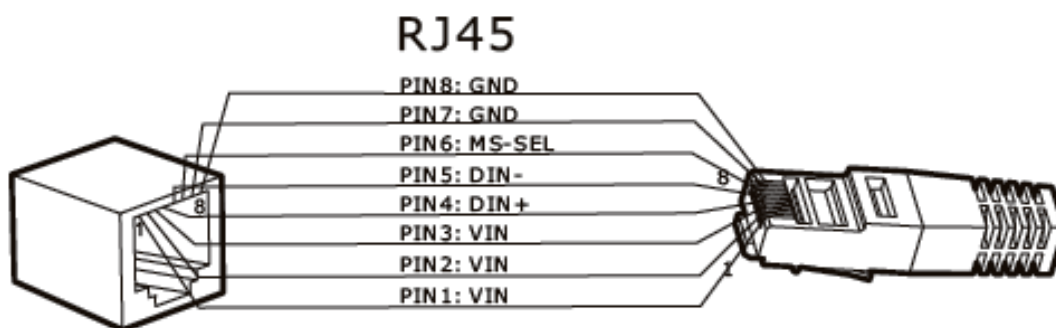
- For proper operation, only qualified and certified personnel should perform installation of this device. **DO NOT** attempt installation and/or operation without proper knowledge how to do so. Any modifications to this device will void the original manufactures warranty and increase the risk of damage and/or personal injury.
- Air inlets must remain clean and never blocked. Device must be installed in a location with adequate ventilation. Allow approx. 6" (15cm) between this device and other devices or a wall for proper cooling.
- Always disconnect from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end, never pull out plug by tugging wire the cord.
- **DO NOT** remove or break off the ground prong from the power cord.
- **DO NOT** operate device if the power cord has become frayed, crimped and/or damaged. If the power cord is damaged, replace it immediately with a new one of similar power rating.
- **NEVER OPEN DEVICE WHILE IN USE!**
- **DO NOT CONNECT THIS DEVICE TO A DIMMER PACK!**
- This device is designed for **INDOOR / DRY LOCATIONS ONLY**.
- **DO NOT** operate device in areas subject to extreme vibrations or bumps.
- **NO FLAMMABLE MATERIALS** close to this device while operating, to prevent any fire hazard.
- **DO NOT** permit operation by persons who are not qualified for operating this type device. Most damages are the result of operations by nonprofessionals.
- Please use the original packaging and materials to transport this device in for service

## OVERVIEW

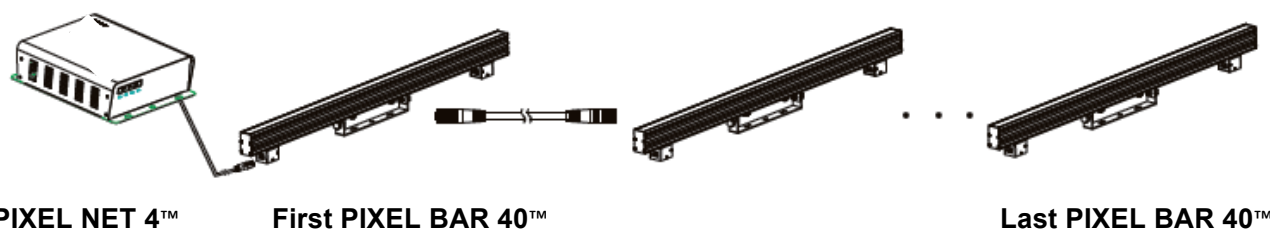


## SETUP

Power and data are supplied to the **PIXEL BAR 40™** via CAT5e Ethernet cable and RJ45 connectors using a daisy chaining method. The following diagram indicates the pin assignment of the RJ45 connector.

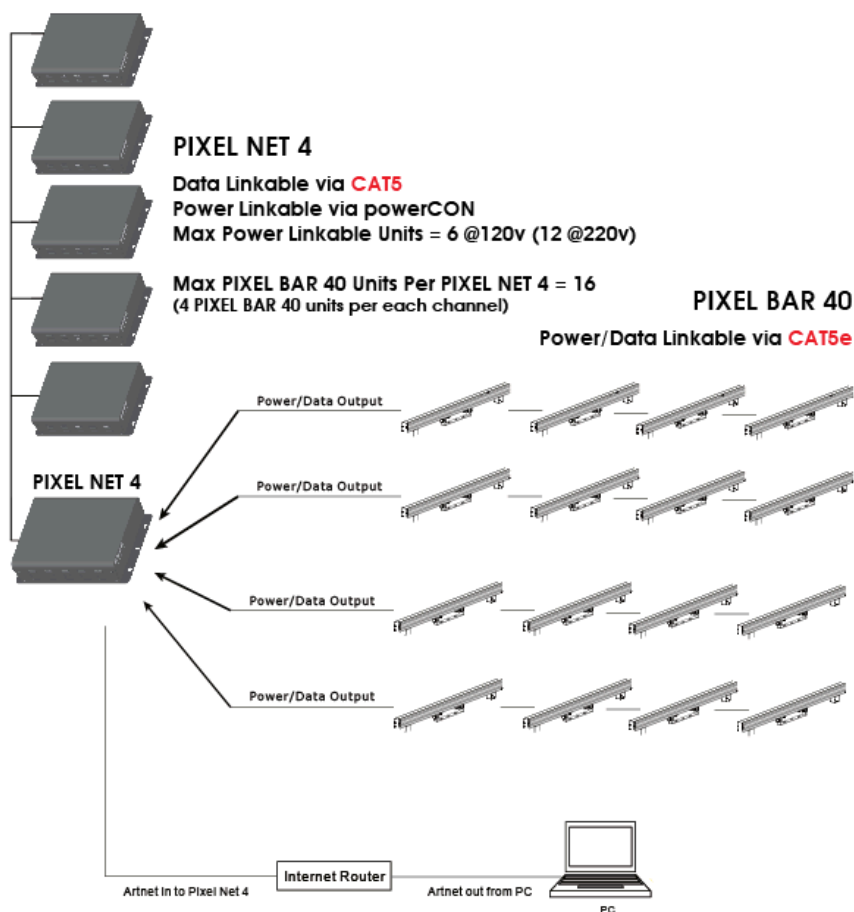


Power and data are connected to the **PIXEL BAR 40™** via the **PIXEL NET 4™** device. (Sold separately) Connect the output of the **PIXEL NET 4™** device directly to the input of the first **PIXEL BAR 40™**. Connect the output of the first fixture in the chain to the input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. The following diagram provides an example of power and data connections.



Each **PIXEL NET 4™** device can control a maximum of (16) **PIXEL BAR 40™** bars, a MAX total of (4) **PIXEL BAR 40™** bars to each of the (4) RJ45 CAT5e outputs.





## INSTALLATION



### CAUTIONS

- For added protection, mount the device in areas outside walking paths, seating areas, or in areas where unauthorized personnel might reach the device.
- Ambient operating temperature range for this fixture is **32° to 104°F (0° to 40°C)**. Do not use the device under or above this temperature.
- Before mounting the device to any surface, make sure the installation area can hold a minimum point load of 10 times the weight of the device. **(60 lbs / 27 kg)**
- Device installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.
- Never stand directly below the device when mounting, removing or servicing.

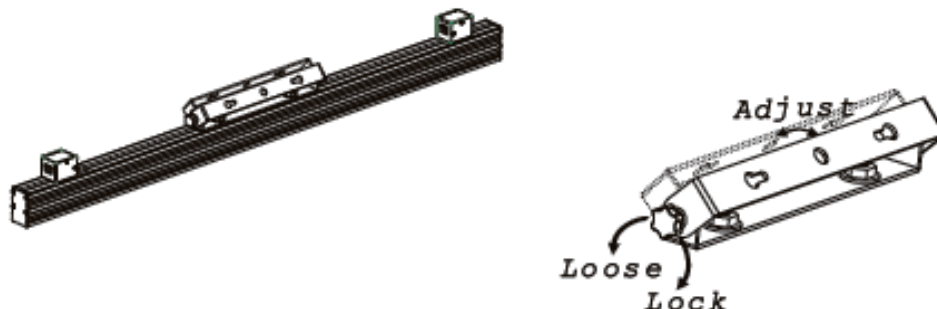


### SAFETY CABLE

**Always use a Safety Cable whenever installing this device in a suspended environment to ensure the device will not drop if the installation method fails.**

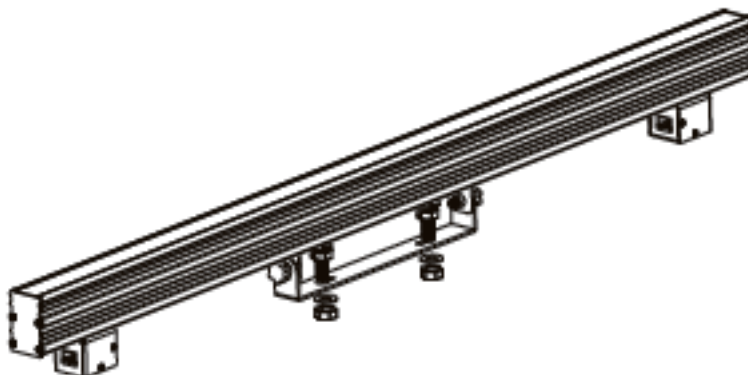
## ADJUSTABLE MOUNTING BRACKET

Adjust the attached mounting bracket by loosening the thumbscrew, set the fixture to the desired position then tighten the thumbscrew to secure the fixture position. (See below)



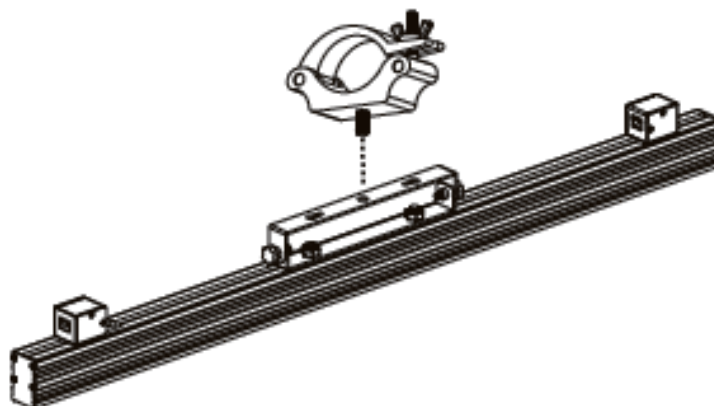
## SURFACE MOUNTING

Use the attached mounting bracket to install the fixture to a desired surface. (See below)



## RIGGING

Using an M10 bolt, attach a rigging clamp to the attached mounting bracket, to install the fixture to truss. (See below)



# DMX CHANNEL FUNCTIONS AND VALUES

ELATION© PIXEL BAR 40™ DMX Channel Values / Functions (120 DMX Channels)		
Specifications are subject to change without any prior written notice.		
CHANNEL	VALUE	FUNCTION
1	0-255	RED
2	0-255	GREEN
3	0-255	BLUE
4	0-255	RED
5	0-255	GREEN
6	0-255	BLUE
7	0-255	RED
8	0-255	GREEN
9	0-255	BLUE
10	0-255	RED
11	0-255	GREEN
12	0-255	BLUE
13	0-255	RED
14	0-255	GREEN
15	0-255	BLUE
16	0-255	RED
17	0-255	GREEN
18	0-255	BLUE
19	0-255	RED
20	0-255	GREEN
21	0-255	BLUE
22	0-255	RED
23	0-255	GREEN
24	0-255	BLUE
25	0-255	RED
26	0-255	GREEN
27	0-255	BLUE
28	0-255	RED
29	0-255	GREEN
30	0-255	BLUE
31	0-255	RED
32	0-255	GREEN
33	0-255	BLUE
34	0-255	RED
35	0-255	GREEN
36	0-255	BLUE
37	0-255	RED
38	0-255	GREEN
39	0-255	BLUE
40	0-255	RED
41	0-255	GREEN
42	0-255	BLUE
43	0-255	RED
44	0-255	GREEN
45	0-255	BLUE

ELATION© PIXEL BAR 40™ DMX Channel Values / Functions (120 DMX Channels)		
Specifications are subject to change without any prior written notice.		
CHANNEL	VALUE	FUNCTION
42	0-255	BLUE
43	0-255	RED
44	0-255	GREEN
45	0-255	BLUE
46	0-255	RED
47	0-255	GREEN
48	0-255	BLUE
49	0-255	RED
50	0-255	GREEN
51	0-255	BLUE
52	0-255	RED
53	0-255	GREEN
54	0-255	BLUE
55	0-255	RED
56	0-255	GREEN
57	0-255	BLUE
58	0-255	RED
59	0-255	GREEN
60	0-255	BLUE
61	0-255	RED
62	0-255	GREEN
63	0-255	BLUE
64	0-255	RED
65	0-255	GREEN
66	0-255	BLUE
67	0-255	RED
68	0-255	GREEN
69	0-255	BLUE
70	0-255	RED
71	0-255	GREEN
72	0-255	BLUE
73	0-255	RED
74	0-255	GREEN
75	0-255	BLUE
76	0-255	RED
77	0-255	GREEN
78	0-255	BLUE
79	0-255	RED
80	0-255	GREEN
81	0-255	BLUE
82	0-255	RED
83	0-255	GREEN
84	0-255	BLUE
85	0-255	RED
86	0-255	GREEN
87	0-255	BLUE
88	0-255	RED
89	0-255	GREEN
90	0-255	BLUE

ELATION© PIXEL BAR 40™		
DMX Channel Values / Functions (120 DMX Channels)		
Specifications are subject to change without any prior written notice.		
CHANNEL	VALUE	FUNCTION
91	0-255	RED
92	0-255	GREEN
93	0-255	BLUE
94	0-255	RED
95	0-255	GREEN
96	0-255	BLUE
97	0-255	RED
98	0-255	GREEN
99	0-255	BLUE
100	0-255	RED
101	0-255	GREEN
102	0-255	BLUE
103	0-255	RED
104	0-255	GREEN
105	0-255	BLUE
106	0-255	RED
107	0-255	GREEN
108	0-255	BLUE
109	0-255	RED
110	0-255	GREEN
111	0-255	BLUE
112	0-255	RED
113	0-255	GREEN
114	0-255	BLUE
115	0-255	RED
116	0-255	GREEN
117	0-255	BLUE
118	0-255	RED
119	0-255	GREEN
120	0-255	BLUE

## CLEANING AND MAINTENANCE



### CAUTION!

Disconnect from mains before starting maintenance operation.

### CLEANING

Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics.

- Clean the external lens surface at least every 20 days with a soft cloth to avoid dirt/debris accumulation. Never use alcohol, solvents, or ammonia based cleaners.

### MAINTENANCE

Regular inspections are recommended to insure proper function and extended life. There are no user serviceable parts inside this device, please refer all other service issues to an authorized Elation service technician. Should you need any spare parts, please order genuine parts from your local Elation dealer.

Please refer to the following points during routine inspections:

- A detailed electric check by an approved electrical engineer every 3 months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation resulting in damage or injury.
- Check for any deformations on the housing, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue or sediments. Never remove the ground prong from the power cable.

## TECHNICAL SPECIFICATIONS

### FEATURES

25mm Pixel Pitch  
120° Viewing Angle  
850 NITs / 2000Hz Refresh Rate  
Extruded Aluminum Housing

### SOURCE

(40) 3-in-1 SMD LEDs

### PHOTOMETRIC DATA

82 LUX (8 FC) @1.6 ft. (0.5m) 120° Full ON

### COLOR

16.7 Million Colors / 8 Bits Per Color

### CONTROL / CONNECTIONS

120 DMX Channels  
(1) RJ45 CAT5e Inputs / (1) RJ45 CAT5e Outputs  
Multiple Unit Linkable: MAX 16 Units per Pixel Net 4™ device

### SIZE / WEIGHT

Length: 39.4" (1000mm)  
Width: 1.5" (38mm)  
Vertical Height: 4.1" (104mm)  
Weight: 6.0 lbs. (2.7kg)

### ELECTRICAL

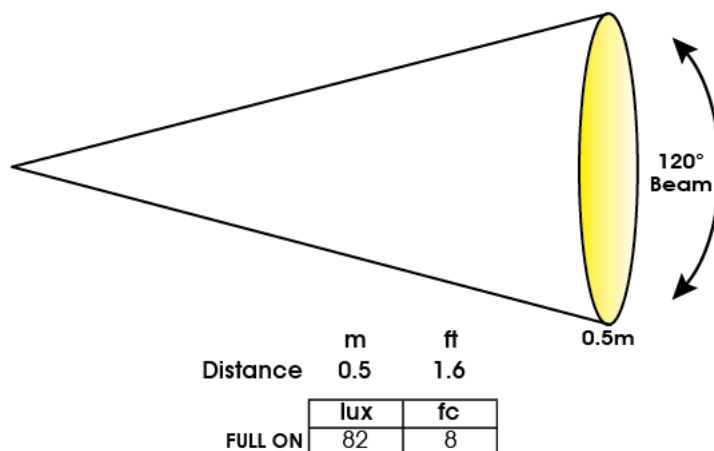
DC-24V  
16W Max Power Consumption

### APPROVALS / RATINGS

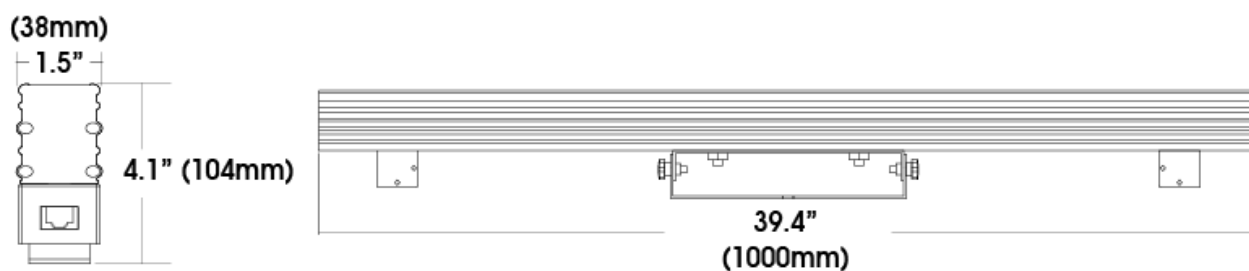
CE Approved  
cETLus Pending  
IP20 Rated

**Please Note:** Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

## PHOTOMETRIC DATA



## DIMENSIONAL DRAWINGS



Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

## OPTIONAL ACCESSORIES

ORDER CODE	ITEM
NARROW CLAMP	Aluminum Pro Clamp with 2-inch Wrap-Around
PLC3	3 ft (1m) powerCON Link Cable
PLC6	6 ft (2m) powerCON Link Cable
PLC10	10 ft (3m) powerCON Link Cable
PLC15	15 ft (5m) powerCON Link Cable



